Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

July 22, 2016

# Public Health Preparedness and Situational Awareness Report: #2016:28 Reporting for the week ending 7/16/16 (MMWR Week #28)

# **CURRENT HOMELAND SECURITY THREAT LEVELS**

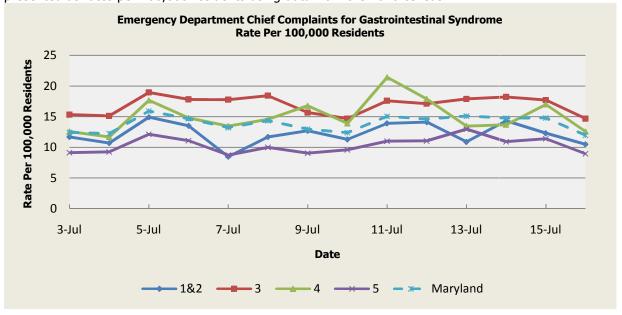
**National:** No Active Alerts

**Maryland:** Level Four (MEMA status)

#### SYNDROMIC SURVEILLANCE REPORTS

# **ESSENCE** (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

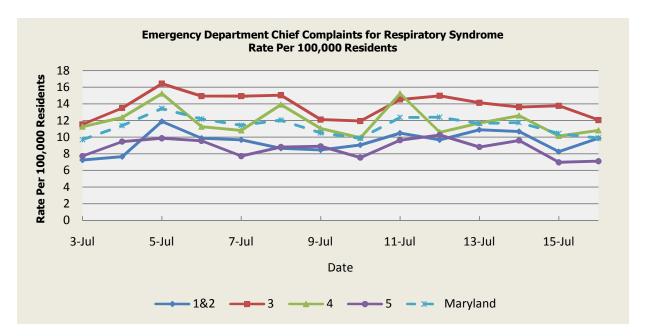
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was one (1) foodborne outbreak reported this week: 1 outbreak of gastroeneteritis/foodborne associated with a Market (Region 5).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.94	14.88	15.42	10.31	13.01	
Median Rate*	12.70	14.47	14.80	10.17	12.75	

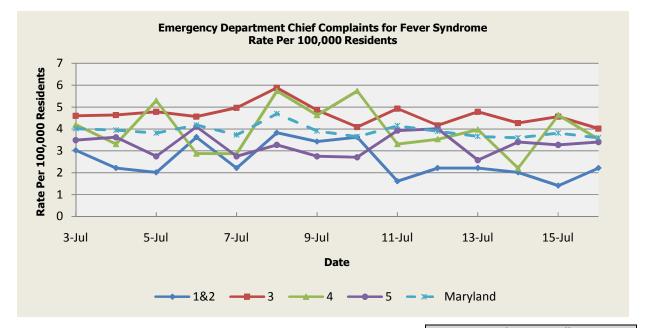
<sup>\*</sup> Per 100,000 Residents



There was one (1) respiratory illness outbreak reported this week: one outbreak of ILI in a Nursing Home (Regions 1&2).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	11.99	14.12	14.04	9.94	12.34		
Median Rate*	11.70	13.37	13.69	9.52	11.79		

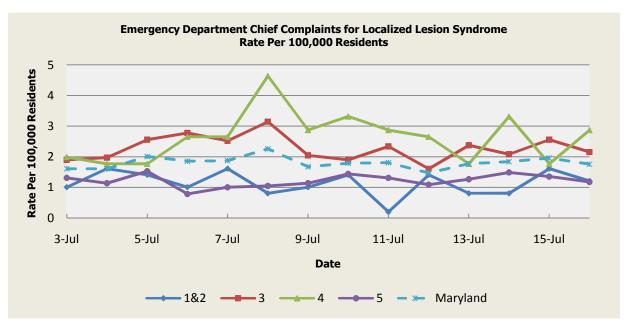
\* Per 100,000 Residents



There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present							
1&2	3	4	5	Maryland			
3.07	3.80	3.93	3.09	3.48			
3.02	3.62	3.75	2.97	3.35			
	1&2 3.07 3.02	182 3 3.07 3.80 3.02 3.62	January 1, 20       1&2     3     4       3.07     3.80     3.93       3.02     3.62     3.75	January 1, 2010 - Pr       182     3     4     5       3.07     3.80     3.93     3.09       3.02     3.62     3.75     2.97			

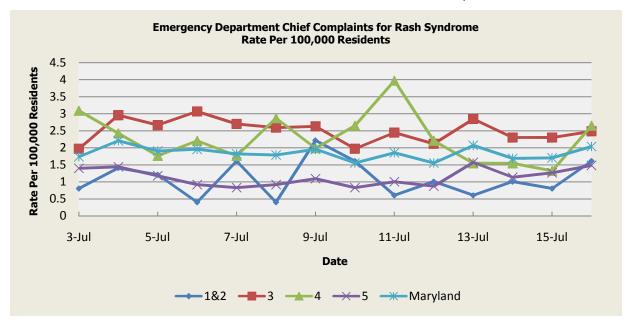
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.07	1.91	2.03	0.98	1.49		
Median Rate*	1.01	1.86	1.99	0.92	1.44		

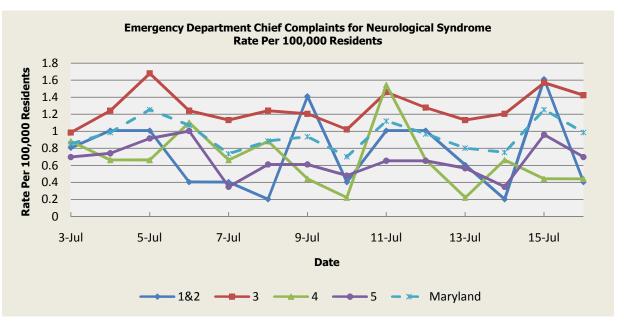
\* Per 100,000 Residents



There were no rash illness outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.30	1.75	1.75	1.04	1.44		
Median Rate*	1.21	1.68	1.77	1.00	1.39		

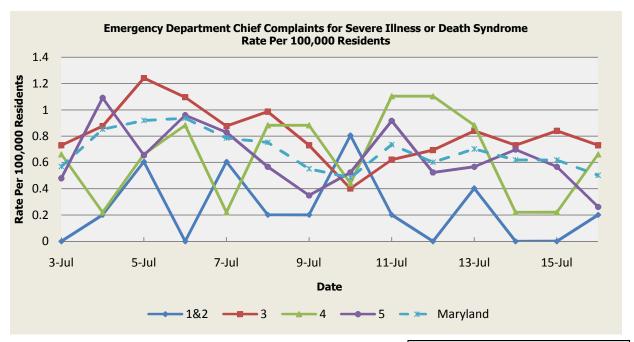
\* Per 100,000 Residents



There were no neurological syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.63	0.73	0.65	0.48	0.62		
Median Rate*	0.60	0.66	0.66	0.44	0.57		

\* Per 100,000 Residents

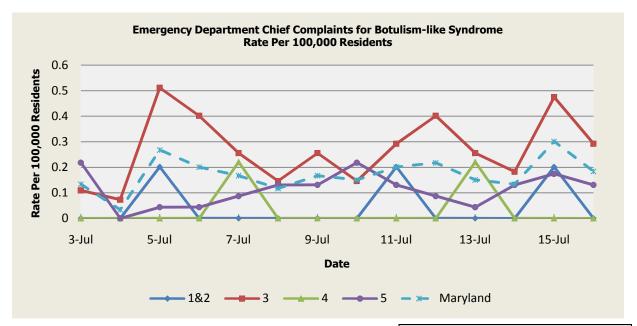


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.70	0.95	0.84	0.44	0.73		
Median Rate*	0.60	0.91	0.88	0.44	0.72		

<sup>\*</sup> Per 100,000 Residents

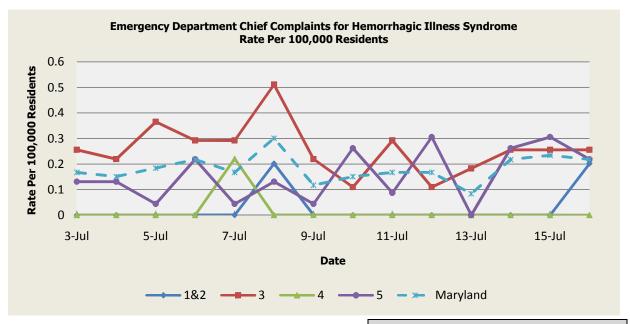
#### **SYNDROMES RELATED TO CATEGORY A AGENTS**



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/3 (Region 5), 7/5 (Regions 1&2,3), 7/6 (Region 3), 7/7 (Regions 3,5), 7/8 Region 5), 7/9 (Regions 3,5), 7/10 (Region 5), 7/11 (Regions 1&2,3,5), 7/12 (Region 3), 7/13 (Regions 3,4), 7/14 (Regions 3,5), 7/15 (Regions 1&2,3,5) and 7/16 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.06	0.08	0.04	0.05	0.06		
Median Rate*	0.00	0.04	0.00	0.04	0.05		

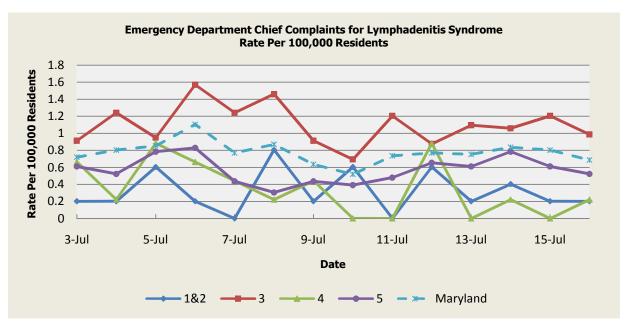
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 7/3 (Region 3), 7/5 (Region 3), 7/6 (Regions 3,5), 7/7 (Regions 3,4), 7/8 (Regions 1&2,3), 7/9 (Region 3), 7/10 (Region 5), 7/11 (Region 3), 7/12 (Region 5), 7/14 (Regions 3,5), 7/15 (Regions 3,5) and 7/16 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.03	0.10	0.03	0.07	0.08		
Median Rate*	0.00	0.04	0.00	0.04	0.03		

<sup>\*</sup> Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 7/3 (Region 5), 7/4 (Region 3), 7/5 (Regions 4,5), 7/6 (Regions 3,5), 7/7 (Region 3), 7/8 (Regions 1&2,3), 7/11 (Region 3), 7/12 (Regions 4,5), 7/13 (Regions 3,5), 7/14 (Regions 3,4), 7/15 (Regions 3,5) and 7/16 (Regions 3,4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.31	0.47	0.34	0.29	0.38		
Median Rate*	0.20	0.37	0.22	0.26	0.32		

<sup>\*</sup> Per 100,000 Residents

#### MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡								
Condition		July		Cumulat	ive (Year to	Date)**			
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*			
Aseptic meningitis	7	27.6	24	7	27.6	24			
Meningococcal disease	0	0.4	0	0	0.4	0			
Measles	0	0	0	0	0	0			
Mumps	0	0.4	0	0	0.4	0			
Rubella	0	0	0	0	0	0			
Pertussis	5	13.4	14	5	13.4	14			
Foodborne Diseases	2016	Mean*	Median*	2016	Mean*	Median*			
Salmonellosis	22	64.4	66	22	64.4	66			
Shigellosis	6	5.8	6	6	5.8	6			
Campylobacteriosis	22	52.6	49	22	52.6	49			
Shiga toxin-producing Escherichia coli (STEC)	3	7.8	7	3	7.8	7			
Listeriosis	1	1.6	2	1	1.6	2			
Arboviral Diseases	2016	Mean*	Median*	2016	Mean*	Median*			
West Nile Fever	0	0.6	0	0	0.6	0			
Lyme Disease	70	152.2	151	70	152.2	151			
<b>Emerging Infectious Diseases</b>	2016	Mean*	Median*	2016	Mean*	Median*			
Chikungunya	0	2	0	0	2	0			
Dengue Fever	2	0.4	0	2	0.4	0			
Zika Virus***	6	0	0	6	0	0			
Other	2016	Mean*	Median*	2016	Mean*	Median*			
Legionellosis	7	12.8	9	7	12.8	9			

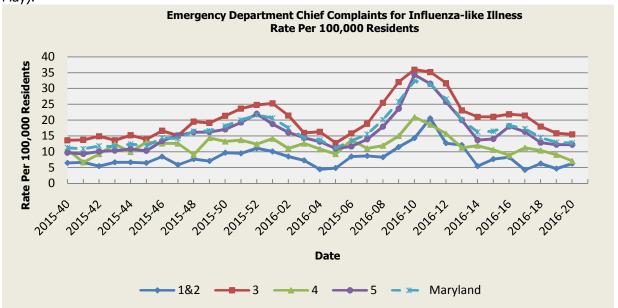
<sup>‡</sup> Counts are subject to change \*Timeframe of 2011-2015

<sup>\*\*</sup>Includes January through current month

<sup>\*\*\*</sup>As of July 20, 2016, the total Maryland Confirmed Zika Virus Infections is 42.

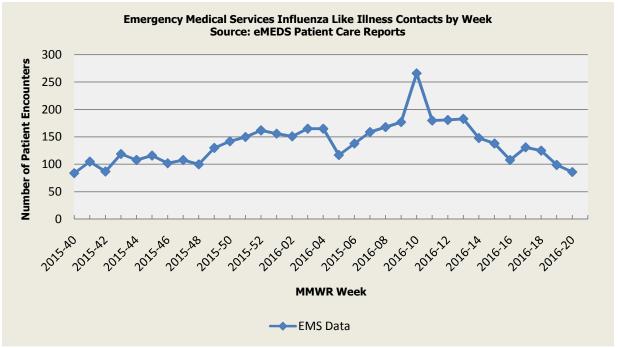
## **SYNDROMIC INFLUENZA SURVEILLANCE**

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).

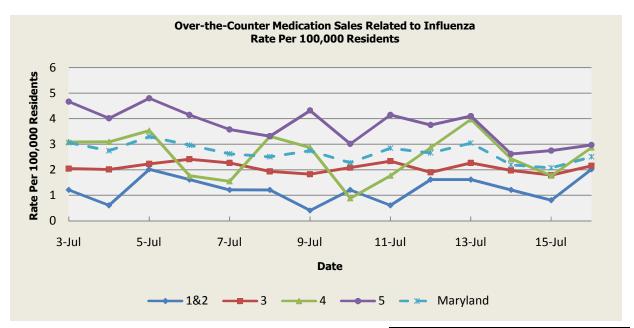


	In	Influenza-like Illness Baseline Data Week 1 2010 - Present							
Health Region	1&2	3	4	5	Maryland				
Mean Rate*	9.26	11.58	10.78	10.43	10.88				
Median Rate*	7.66	8.99	9.05	8.03	8.72				

\* Per 100,000 Residents



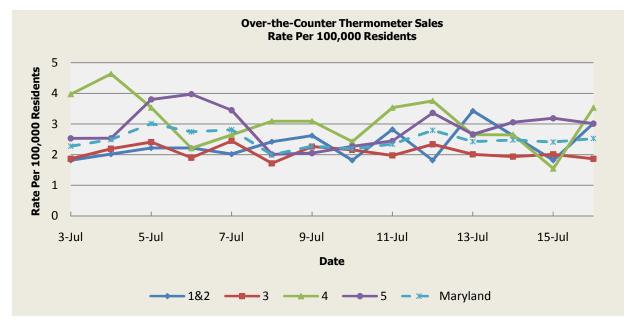
**Disclaimer on eMEDS flu related data**: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.



There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.86	6.41	1.86	13.92	8.73
Median Rate*	3.02	5.30	1.55	11.35	7.13

\* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	4.12	4.71	1.61	7.30	5.42
Median Rate*	3.63	4.35	1.55	6.68	4.97

\* Per 100,000 Residents

## PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase**: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of <u>June 13, 2016</u>, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 851, of which 450 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

#### **Avian Influenza in Humans:**

**H7N9 (CHINA):** 14 Jul 2016, On 15 Jun 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 5 additional laboratory confirmed cases of human infection with avian influenza A(H7N9) virus, including 1 death. Read More: <a href="http://www.promedmail.org/post/4343947">http://www.promedmail.org/post/4343947</a>

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

## **Avian Influenza in Poultry:**

**H5N1 (WASIT):** 14 Jul 2016, On Tue 12 Jul 2016, the Wasit Provincial Council reported cases of bird flu in a number of poultry farms in the areas north of the province (city of Kut) and directed the concerned authorities to destroy more than 2.5 million chickens. They also called on the Ministry of Health to take urgent measures to control the spread of the disease. Read More: <a href="http://www.promedmail.org/post/4345054">http://www.promedmail.org/post/4345054</a>

**H7N9 (CHINA):** 14 Jul 2016, On 15 Jun 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 5 additional laboratory confirmed cases of human infection with avian influenza A(H7N9) virus, including 1 death. Read More: http://www.promedmail.org/post/4343947

## **NATIONAL DISEASE REPORTS**

**E. COLI EHEC (ILLINOIS):** 15 Jul 2016, An outbreak of *E. coli* at Carbon Live Fire Mexican Grill has grown to include 65 people who have become ill, more than double the number initially reported by the Chicago Department of Public Health. The restaurant has locations in Bridgeport and on the North Side. The North Side restaurant has been found by city health inspectors to be "safe" and "clean." The 2 locations share a phone number, and a person answering the phone Thu [14 Jul 2016] morning said the North Side spot is open, and the Bridgeport restaurant remains closed for now. Read More: <a href="http://www.promedmail.org/post/4345845">http://www.promedmail.org/post/4345845</a>

**PLAGUE (NEW MEXICO):** 20 Jul 2016, State health officials confirmed the first case of plague in 2016 in Bernalillo County on Tue [19 Jul 2016]. The State Department of Health says a 77-year-old Bernalillo County man has contracted the disease, making this the 2nd human case of plague in New Mexico in 2016. They say the other case was in a teen from Rio Arriba County who did recover. So far in 2016, there have also been 16 cases of plague in pets, according to state health officials. Read More: http://www.promedmail.org/post/4357878

**E. COLI EHEC (WASHINGTON):** 21 Jul 2016, A school in Monroe has closed after 2 young girls there were hospitalized with a serious *E. coli* infection, the Snohomish County Health District reports. The girls, both under 5, attended the preschool at the Monroe Montessori School on Village Way. Heath officials decided to close the entire school as a precaution and will be contacting the 60 students and 10 staff members who went there after 11 Jul 2016. The 2 children were hospitalized due to complications from a Shiga toxin-producing *E. coli* infection. One has developed a serious kidney disease [probably hemolytic-uremic syndrome]. Read More: <a href="http://www.promedmail.org/post/4360070">http://www.promedmail.org/post/4360070</a>

**ZIKA VIRUS (AMERICAS):** 22 Jul 2016, A routine investigation by the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) identified a nonpregnant woman in her 20s who reported she had engaged in a single event of condomless vaginal intercourse with a male partner the day she returned to NYC (day 0) from travel to an area with ongoing Zika virus transmission. She had headache and abdominal cramping while in the airport awaiting return to NYC. The following day (day 1) she developed fever, fatigue, a maculopapular rash, myalgia, arthralgia, back pain, swelling of the extremities, and numbness and tingling in her hands and feet. In addition, on day 1, the woman began menses that she described as heavier than usual...The woman's male partner, also in his 20s, developed fever, a maculopapular rash, joint pain, and conjunctivitis 7 days after sexual intercourse (day 6). Read More: http://www.promedmail.org/post/4361791

# **INTERNATIONAL DISEASE REPORTS**

**E. COLI EHEC (ENGLAND):** 15 Jul 2016, The South West of England is "particularly affected" by an outbreak of a potentially deadly infection - which has so far resulted in 2 deaths. Public Health England is warning people to be aware of the *E. coli O157* risks, which appears to be connected to eating mixed salad leaves. Read More: <a href="http://www.promedmail.org/post/4347888">http://www.promedmail.org/post/4347888</a>

**NOROVIRUS (ITALY):** 17 JUL 2016, According to a press release, 7 children, between 5 and 7 years of age, presented on 1 Jul 2016 at the emergency room of 2 of the main hospitals in Palermo [Sicily], Italy, the Children's Hospital and the Cervello Hospital, with vomiting, fever, and diarrhea. All the young patients had in common a visit in the previous 2 days at the Acquapark in Monreale. None of them hat eaten at the cafeteria of the park and they did not share food. Read More: <a href="http://www.promedmail.org/post/4360244">http://www.promedmail.org/post/4360244</a>

# OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <a href="http://preparedness.dhmh.maryland.gov/">http://preparedness.dhmh.maryland.gov/</a> or follow us on Facebook at <a href="http://www.facebook.com/MarylandOPR">www.facebook.com/MarylandOPR</a>.

More data and information on influenza can be found on the DHMH website: <a href="http://phpa.dhmh.maryland.gov/influenza/fluwatch/Pages/Home.aspx">http://phpa.dhmh.maryland.gov/influenza/fluwatch/Pages/Home.aspx</a>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <a href="http://flusurvey.dhmh.maryland.gov">http://flusurvey.dhmh.maryland.gov</a>

**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE			
	Allegany County			
Dagiona 1 % 2	Frederick County			
Regions 1 & 2	Garrett County			
	Washington County			
	Anne Arundel County			
	Baltimore City			
Pagion 2	Baltimore County			
Region 3	Carroll County			
	Harford County			
	Howard County			
	Caroline County			
	Cecil County			
	Dorchester County			
	Kent County			
Region 4	Queen Anne's County			
	Somerset County			
	Talbot County			
	Wicomico County			
	Worcester County			
	Calvert County			
	Charles County			
Region 5	Montgomery County			
	Prince George's County			
	St. Mary's County			

